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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,858

12/21/2005

Cornelis Johannes Josephus Jansen

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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EXAMINER

PATEL, ASHOK

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,858	<b>Applicant(s)</b> JANSEN ET AL.	
	<b>Examiner</b> Ashok Patel	<b>Art Unit</b> 2889	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-15 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

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1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in EPO on 06/26/2003. It is noted, however, that applicant has not filed a certified copy of the EPO application 03101913.6 as required by 35 U.S.C. 119(b). Further, it appears that all necessary papers in support of the claim of priority of Nation stage PCT application are not in the record of the application.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claims 1 and 8-15 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 5-12 of U.S. Patent No. 7,180,232. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 5-12 recite applicant's claimed low pressure mercury vapor discharge lamp, and a compact fluorescent lamp, including a source of mercury and releasing means as follows.

Claims of U.S. Patent Application S.N. 10/561,858	Claims of U.S. Patent 7,180,232
Claim 1. low-pressure mercury vapor discharge lamp (Figures 1-5) including: a light-transmitting discharge vessel (10) enclosing, in a gastight manner, a discharge space provided with a filling of mercury and a rare gas, the discharge vessel including discharge means for maintaining a discharge in the discharge space, the discharge vessel being provided with a source of mercury, the discharge vessel being provided with a releasing means (42, 76) for the controlled release of mercury vapor from the source of mercury, the releasing means being operative in response to a condition of the low-pressure mercury vapor discharge lamp, the condition being such that satisfies applicant's claimed characteristics of the	Claims 1, 8.

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discharge lamp and/or a pre-determined time interval.	
Claim 8. A low-pressure mercury vapor discharge lamp as claimed in claim 1, characterized in that the lamp characteristics is the arc characteristic of the discharge in the discharge vessel, a decreased lumen output of the discharge lamp, an increased infrared contribution to the lamp spectrum of the discharge lamp, a change in the lamp voltage, changes in the dynamic behavior of the discharge lamp and/or the occurrence of striations in the discharge lamp.	Claims 1, 8.
Claim 9. A low-pressure mercury vapor discharge lamp as claimed in claim 1, characterized in that the product of the mercury pressure $p_{Hg}$ and the internal diameter $D_{in}$ of the discharge vessel is in the range $0.13 \text{ pHg} \times D_{in} \geq 8 \text{ Pa.cm}$ .	Claim 1, 5.
Claim 10. A low-pressure mercury vapor discharge lamp as claimed in claim 1, characterized in that the product of the mercury pressure $p_{Hg}$ and the internal diameter $D_{in}$ of the discharge vessel is in the range $0.13 \text{ pHg} \times D_{in} \geq 4 \text{ Pa.cm}$ .	Claim 1, 6.
Claim 11. A low-pressure mercury vapor discharge lamp as claimed in claim 1, characterized in that the discharge vessel contains less than 0.1 mg mercury.	Claim 1, 7.
Claim 12. A compact fluorescent lamp comprising a low-pressure mercury-vapor discharge lamp, as claimed in claim 1, the	Claim 1, 9.

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<p>compact fluorescent lamp comprising:</p> <p>at least two dual-shaped lamp parts, each comprising a first tube and a second tube, the first tube and the second tube at a first end portion of each tube being interconnected via tube interconnection means, a discharge path being formed through the tubes between a first and a second electrode, each electrode being provided at a second end portion of one of the tubes, the second end portions facing away from the first end portions, the electrodes being provided at extreme ends of the fluorescent lamp,</p> <p>further second end portions of the tubes being provided with a sealed portion,</p> <p>bridge parts for mutually connecting tubes of adjacent dual-shaped lamp parts being provided in the proximity of the second end portions of the tubes, at least one of the further second end portions being provided with the source of mercury and the releasing means.</p>	
<p>Claim 13. A compact fluorescent lamp as claimed in claim 12, characterized in that a heating means is provided at the further second end portion.</p>	<p>Claims 1, 10.</p>
<p>Claim 14. A compact fluorescent lamp as claimed in claim 12, characterized in that the tube interconnection means is either a bridge portion or a bent portion.</p>	<p>Claims 1, 11.</p>

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Claim 15. A compact fluorescent lamp as claimed in claim 12, characterized in that a lamp housing is attached to the discharge vessel of the low-pressure mercury-vapor discharge lamp, which lamp housing is provided with a lamp cap.	Claims 1, 12.
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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Bouchard (USPN 5274305).

Bouchard discloses applicant's claimed low-pressure mercury vapor discharge lamp (Figures 1-5) including:

a light-transmitting discharge vessel (10) enclosing, in a gastight manner, a discharge space provided with a filling of mercury and a rare gas,

the discharge vessel including discharge means for maintaining a discharge in the discharge space, the discharge vessel being provided with a source of mercury,

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the discharge vessel being provided with a releasing means (42, 76) for the controlled release of mercury vapor from the source of mercury,

the releasing means being operative in response to a condition of the low-pressure mercury vapor discharge lamp,

the condition being such that satisfies applicant's claimed characteristics of the discharge lamp and/or a pre-determined time interval.

As to claim 2, Bouchard discloses the releasing means being operated via a switch (starter 64).

As to claim 6, the Examiner takes the position that Bouchard discloses the source of mercury including a mercury dispenser material (amalgam 44, Figure 2). Note that applicant has not disclosed sufficient structure of the mercury dispenser material.

As to claim 7, the Examiner takes the position that Bouchard discloses the condition of the lamp as indicative of a content of mercury vapor in the discharge lamp below a predetermined level. Note that the term "predetermined level" is narrative in form, also a relative term, and does not constitute positive structure of the claimed lamp.

As to claim 8, the Examiner takes the position that Bouchard discloses the condition of the lamp as being at least



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one of: arc characteristics as the arc characteristic of the discharge in the discharge vessel or a decreased lumen output of the discharge lamp or an increased infrared contribution to the lamp spectrum of the discharge lamp or a change in the lamp voltage or changes in the dynamic behavior of the discharge lamp or the occurrence of striations in the discharge lamp.

6. Claims 1 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Lighthart et al (USPN 5274305).

Lighthart et al disclose applicant's claimed low-pressure mercury vapor discharge lamp (Figures 1, 2 and 6-8) including:

a light-transmitting discharge vessel (10) enclosing, in a gastight manner, a discharge space provided with a filling of mercury and a rare gas,

the discharge vessel including discharge means (41a, 41b) for maintaining a discharge in the discharge space, the discharge vessel being provided with a source of mercury,

the discharge vessel being provided with a releasing means (20) for the controlled release of mercury vapor from the source of mercury,

the releasing means being operative in response to a condition of the low-pressure mercury vapor discharge lamp,

the condition being such that satisfies applicant's claimed characteristics of the discharge lamp and/or a pre-determined time interval.

As to claim 6, the Examiner takes the position that Ligthart et al disclose the source of mercury including a mercury dispenser material (Figures 2, 6-8). Note that applicant has not disclosed sufficient structure of the mercury dispenser material.

As to claim 7, the Examiner takes the position that Ligthart Bouchard discloses the condition of the lamp as indicative of a content of mercury vapor in the discharge lamp below a predetermined level. Note that the term "predetermined level" is narrative in form, also a relative term, and does not constitute positive structure of the claimed lamp.

As to claim 8, the Examiner takes the position that Ligthart discloses the condition of the lamp as being at least one of: arc characteristics as the arc characteristic of the discharge in the discharge vessel or a decreased lumen output of the discharge lamp or an increased infrared contribution to the lamp spectrum of the discharge lamp or a change in the lamp voltage or changes in the dynamic behavior of the discharge lamp or the occurrence of striations in the discharge lamp.

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 4, 5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lighthart et al, as applied to claim 1).

As to claim 4, Bouchard does not disclose the switch device made of a reed relay, as claimed by applicant. However, since the switching device could be provided in any suitable alternative configuration, applicant's claimed reed relay switching device would have been a matter of obvious alternative design choice to one of ordinary skill in the art.

As to claim 5, Bouchard does not disclose the releasing means being operated via an arc discharge, as claimed by applicant. However, since operation of the releasing means could

be carried out by any suitable arrangement, applicant's claimed operation of the releasing means via an arc discharge would have been a matter of obvious alternative design choice to one of ordinary skill in the art.

As to claims 9-11, applicant's claimed product of the pressure and diameter of the discharge vessel in a certain range or mercury content in a claimed amount would have been obvious to one of ordinary skill in the art since it has been held that where general conditions of the claim are discovered in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re Aller, 105 USPQ 233.

9. Claims 4, 5, 9-12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ligthart et al, as applied to claim 1).

As to claim 4, Ligthart et al do not disclose the switch device made of a reed relay, as claimed by applicant. However, since the switching device could be provided in any suitable alternative configuration, applicant's claimed reed relay switching device would have been a matter of obvious alternative design choice to one of ordinary skill in the art.

As to claim 5, Ligthart et al do not disclose the releasing means being operated via an arc discharge, as claimed by

applicant. However, since operation of the releasing means could be carried out by any suitable arrangement, applicant's claimed operation of the releasing means via an arc discharge would have been a matter of obvious alternative design choice to one of ordinary skill in the art.

As to claims 9-11, applicant's claimed product of the pressure and diameter of the discharge vessel in a certain range or mercury content in a claimed amount would have been obvious to one of ordinary skill in the art since it has been held that where general conditions of the claim are discovered in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re Aller, 105 USPQ 233.

As to claim 12, Lighthart et al disclose applicant's claimed compact fluorescent lamp (Figure 1) including a low-pressure mercury-vapor discharge lamp, as mentioned earlier, the compact fluorescent lamp including:

at least two dual-shaped lamp parts (inverted U shaped top left hand side and right hand side parts as shown in Figure 235; 36; 37), each comprising a first tube (the tube that holds electrode 41a) and a second tube (the tube that is parallel to the first tube that does not include electrode), the first tube and the second tube at a first end portion (top end portion) of

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each tube being interconnected via (inverted U-shaped) tube interconnection means,

a discharge path being formed through the tubes between a first and a second electrode, each electrode being provided at a second end portion (bottom end portion) of one of the tubes, the second end portions facing away from the first end portions, the electrodes being provided at extreme ends of the fluorescent lamp,

further second end portions (portions that are associated with bottom U-shaped portion),

bridge parts (bottom U-shaped portion) for mutually connecting tubes of adjacent dual-shaped lamp parts being provided in the proximity of the second end portions of the tubes, at least one of the further second end portions being provided with the source of mercury and the releasing means.

Ligthart et al differ from applicant's claimed lamp in that the further end portions are not provided with sealed end.

Instead, Ligthart et al disclose the U shaped portion connecting two legs of the further end portions.

However since either configuration performs the same function, which is to bridge the two further end portions, applicant's claimed sealed end of the further second end

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portions would have been a matter of obvious alternative design choice to one of ordinary skill in the art.

As to claim 14, Ligthart et al disclose the tube interconnection means being a bridge or bent portion (the inverted U-shaped bent portion itself is a bridge portion).

As to claim 15, Ligthart et al disclose a lamp housing attached to the discharge vessel of the low-pressure mercury-vapor discharge lamp, the lamp housing being provided with a lamp cap (71, 73).

10. Claims 3 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 3, prior art of the record does not disclose applicant's claimed low pressure mercury vapor discharge lamp of claim 3, which includes all limitations of intervening claims 1 and 2, in that the switch device is mounted in the discharge vessel.

As to claim 13, prior art of the record does not disclose applicant's claimed low pressure mercury vapor discharge lamp of claim 13, which includes all limitations of intervening claims 1

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and 12, in which a heating means is provided at the further second end portion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on 571-272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ashok Patel/  
**Ashok Patel**  
**Primary Examiner**  
**Art Unit 2879**